This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-10 (canceled)

Claim 11 (new): Sensor for transmission measurement in a washing machine or dishwasher with:

- a carrier (2, 104),
- a transmitter (4, 106) attached to the carrier (2, 104) to emit a transmitter beam (8),
- a receiver (6, 108) attached to the carrier (2, 104) to receive the beam generated by the transmitter (4, 106), and
- a diaphragm system (12, 128) arranged on the carrier (2, 104) spaced from the transmitter (4, 106), with a transmitter diaphragm (14, 130) arranged in the beam path of the transmitter beam in order to generate a measurement beam (18) aligned to the receiver (6, 108).

Claim 12 (new): Sensor for transmission measurement in a washing machine or dishwasher with:

- a carrier (2, 104),
- a transmitter (4, 106) attached to the carrier (2, 104) to emit a transmitter beam (8),
- a receiver (6, 108) attached to the carrier (2, 104) to receive the beam generated by the transmitter (4, 106), and
- a diaphragm system (12, 128) arranged on the carrier (2, 104) spaced from the receiver (6, 108) with a receiver diaphragm (16, 132) arranged in the beam path of the transmitter beam (8) to

generate a reception beam aligned to the receiver (6, 108).

Claim 13 (new): Sensor for transmission measurement in a washing machine or dishwasher with:

- a carrier (2, 104),
- a transmitter (4, 106) attached to the carrier (2, 104) to emit a transmitter beam (8),
- a receiver (6, 108) attached to the carrier (2, 104) to receive the beam generated by the transmitter (4, 106) and
- a diaphragm system (12, 128) arranged on the carrier (2, 104) spaced from the transmitter (4, 106) and receiver (6, 108) with a transmitter diaphragm (14, 130) arranged in the beam path of the transmitter beam (8) to generate a measurement beam (18) and with a receiver diaphragm (16, 132) arranged in the beam path of the measurement beam (18) to generate a reception beam aligned to the receiver (6, 108).

Claim 14 (new): Sensor according to claim 11 in which the carrier (2, 104) has a first leg (114) on which the transmitter (4, 106) is arranged and a second leg (116) on which the receiver (6, 108) is arranged opposite the transmitter (4, 106).

Claim 15 (new): Sensor according to claim 11, in which the carrier (2, 104) comprises legs (114, 116) which are of different lengths and on the free end (120) of the longer leg (116) of the carrier (2, 104) is arranged a temperature sensor (122).

Claim 16 (new): Sensor according to claim 11, in which the diaphragm system has a first diaphragm system leg which holds the transmitter diaphragm (14, 130).

Claim 17 (new): Sensor according to claim 12 in which the carrier (2, 104) has a first leg (114) on which the transmitter (4, 106) is arranged and a second leg (116) on which the receiver (6, 108) is arranged opposite the transmitter (4, 106).

Claim 18 (new): Sensor according to claim 12, in which the carrier (2, 104) comprises legs (114, 116) which are of different lengths and on the free end (120) of the longer leg (116) of the carrier (2, 104) is arranged a temperature sensor (122).

Claim 19 (new): Sensor according to claim 12, in which the diaphragm system has a first diaphragm system leg which holds the transmitter diaphragm (14, 130).

Claim 20 (new): Sensor according to claim 13 in which the carrier (2, 104) has a first leg (114) on which the transmitter (4, 106) is arranged and a second leg (116) on which the receiver (6, 108) is arranged opposite the transmitter (4, 106).

Claim 21 (new): Sensor according to claim 13, in which the carrier (2, 104) comprises legs (114, 116) which are of different lengths and on the free end (120) of the longer leg (116) of the carrier (2, 104) is arranged a temperature sensor (122).

Claim 22 (new): Sensor according to claim 13, in which the diaphragm system has a first diaphragm system leg which holds the transmitter diaphragm (14, 130).

Claim 23 (new): Sensor according to claim 12, in which the diaphragm system has a second diaphragm system leg which holds the first receiver diaphragm (16, 132).

Claim 24 (new): Method for production of a sensor to measure the transmission of a fluid in a washing machine or a dishwasher with the following steps:

- provision of a carrier,
- provision of a transmitter to emit a transmitter beam,
- provision of a receiver to receive a reception beam,
- provision of a diaphragm system with a transmitter diaphragm,
- attachment of the transmitter and receiver on the carrier, and
- arrangement of the diaphragm system on the carrier so that the diaphragm system is spaced from the transmitter and the transmitter diaphragm is arranged in the beam path of the transmitter beam in order to generate a measurement beam aligned to the receiver.

Claim 25 (new): Method for production of a sensor to measure the transmission of a fluid in a washing machine or a dishwasher with the following steps:

- provision of a carrier,
- provision of a transmitter to emit a transmitter beam,
- provision of a receiver to receive a reception beam,
- provision of a diaphragm system with a receiver diaphragm,
- attachment of the transmitter and receiver on the carrier, and
- arrangement of the diaphragm system on the carrier so that the diaphragm system is spaced from the transmitter and the receiver diaphragm is arranged in the beam path of the transmitter beam in order to generate a reception beam aligned to the receiver.

Claim 26 (new): Method for production of a sensor to measure the transmission of a fluid in a washing machine or a dishwasher with the following steps:

- provision of a carrier,
- provision of a transmitter to emit a transmitter beam,
- provision of a receiver to receive a reception beam,
- provision of a diaphragm system with a transmitter diaphragm and a receiver diaphragm,
- attachment of the transmitter and receiver on the carrier, and
- arrangement of the diaphragm system on the carrier so that the diaphragm system is spaced from the transmitter and the receiver, the transmitter diaphragm is arranged in the beam

path of the transmitter beam in order to generate a measurement beam and the receiver diaphragm is arranged in the beam path of the measurement beam to generate a reception beam aligned to the receiver.